c) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?

The PDR and MDR lots are not located on or near lands that are considered farmland by state, regional or local agencies. Sale of the lots and subsequent development of the lands for urban uses would not result in uses inconsistent or detrimental to existing or future agricultural activities in the area nor would the sale or subsequent development promote or accelerate the conversion of such existing agricultural lands to non-agricultural uses.

III. AIR QUALITY

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
III.	**AIR QUALITY** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

SUMMARY

The proposed project presents potentially significant air quality related impacts from potential exposure of sensitive receptors to methane and odor impacts from potentially leaking wells of the PDRGSF. These impacts will be analyzed and considered in greater detail in the EIR with the addition of new field sampling data currently being collected.

IMPACTS ANALYSIS

SALE AND DEVELOPMENT OF THE PLAYA DEL REY AND MARINA DEL REY LOTS

Please see Appendix B for an extensive background analysis of the Air Quality resource.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Air emissions in the South Coast Air Basin (SCAB) are regulated by the South Coast Air Quality Management District (SCAQMD). Pursuant to the federal Clean Air Act (CAA), the SCAQMD is required to reduce emissions of criteria pollutants for which the SCAB is in non-attainment. Strategies to achieve these emissions reductions are developed in the Air Quality Management Plan (AQMP) prepared by SCAQMD (1997) for the region. Chapter 3 of the 1997 AQMP states, "future emissions forecasts are based on demographic and economic growth projections provided by the Southern California Association of Governments (SCAG)." Individual projects and long-term programs within the region are required to be consistent with population, employment, and housing projections.

Currently, the City of Los Angeles is updating the Westchester Community Plan and General Plan Framework. The update to the Westchester Playa Del Rey Community Plan and General Plan Framework Element plans for a population increase of 42,586 people over the next twenty years. The population increase would lead to a planned increase of 24,443 housing units in the Plan area.

Development of the PDR and MDR lots would provide as many as 80 housing units. Development associated with the property sale is accounted for in the Community and General Plan Framework. Development of the property would construct less than one percent of the planned homes for this community plan area. According to demographic projections, development arising from the sale of the subject properties would be consistent with SCAG housing projections and as such would be consistent with the AQMP.

The SCAQMD (2000) Air Toxics Control Plan is intended to protect the public from possible sources of air toxics emissions. Future development on project lots, if performed on top of the abandoned oil and gas wells, could impede access to controlling any potential future leaks from these wells and potentially result in a release of air toxics. However, given the history of oil and gas development in the project area it is not uncommon at all for structures to be installed on abandoned oil and gas well sites. With proper well abandonment procedures and compliance with any required protection measures for construction atop such facilities, no planning inconsistencies should occur. Development associated with the proposed project would not conflict with or obstruct implementation of applicable air quality plans and therefore would represent a less than significant impact.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The primary project impact would derive from sources of air emissions associated with homes or commercial buildings built upon the 36 lots. Emissions sources would include stationary and mobile sources. Stationary sources of emissions include onsite emissions generated as a result of the combustion of natural gas and off-site emissions resulting from an increased electrical energy demand. Stationary source emissions would contribute an insignificant amount to local operational emissions when compared to mobile sources of emissions. Mobile source emissions are motor vehicle emissions and would be the largest source of pollutants that would result from the implementation of the proposed project.

The SCAQMD has established emissions significance thresholds for construction and operational emissions. For planning purposes, the SCAQMD has published screening tables for operations to assess potential significance for air quality.[2] The SCAQMD has established a threshold for potentially significant air quality impacts at 166 housing units. The proposed project could lead to the addition of up to 80 housing units. According to the SCAQMD CEQA Air Quality Handbook, operational emissions associated with the addition of 80 housing units would not be anticipated to result in a significant impact to air quality.

The SCAQMD has established air emissions thresholds associated with construction projects. Construction related emissions would primarily be, 1) dust generated from grading and excavation; 2) hydrocarbon emissions from paints and asphalt; 3) exhaust emissions from powered construction equipment; and 4) motor vehicle emissions associated with construction activities. Construction on the individual parcels could occur over a wide or narrow time frame depending on the individual developer's time schedules. A worst-case scenario would involve the simultaneous development of all project parcels.

For planning purposes, the SCAQMD has published screening tables for construction projects to assess potential significance for air quality.[3] The SCAQMD has established a threshold for potentially significant air quality impacts at 1,309,000 square feet of construction per three-month period. Assuming that each house would be 3,000 square feet, the proposed project could lead to the total construction of 240,000 square feet of residential properties. As the proposed project would not exceed screening table thresholds, construction associated with development of the lots would not be anticipated to result in a significant impact to air quality. Development of the PDR and MDR lots would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and would be a less than significant impact.

Although the proposed project, based on this screening analysis represents a less than significant impact, SCAQMD CEQA rules require that this impact be considered further in greater detail and quantification of potential construction and operation emissions as well as any mitigation measures in the EIR (SCAQMD, 1993).

2 SCAQMD CEQA Air Quality Handbook, 1993, Table 6-2. Screening Tables for Operation-Daily Thresholds of Potential Significance for Air Quality.

3 SCAQMD CEQA Air Quality Handbook, 1993, Table 6-3. Screening Tables for Construction-Quarterly Thresholds of Potential Significance for Air Quality.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

The same threshold levels comprising a "substantial" contribution to an existing, or projected air quality violation in checklist item "b" above would also apply to a "cumulatively considerable net increase." The project is located in a non-attainment area for ozone, carbon monoxide and particulate matter. Any increase in precursor pollutants from cumulative growth would be potentially adverse. While the impact from this single project would be well below SCAQMD significance thresholds, cumulative impacts can potentially result from the addition of hundreds of small projects that exacerbate the basin's inability to meet clean air standards. The proposed project is not expected to exceed SCAQMD significance criteria for construction or operational activities. As such, the addition of as many as 80 housing units would not cumulatively impact air quality on a regional scale. Development of the PDR and MDR lots would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standards and is therefore a less than significant impact.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. SCAQMD (1993) includes in its list of sensitive receptors that includes:

- Residences
- Schools
- Playgrounds
- Childcare centers
- Convalescent homes
- Retirement homes
- Rehabilitation centers
- Athletic facilities

Sensitive population groups include:

- Children
- Elderly persons
- Acutely and chronically ill persons (especially those with cardio-respiratory diseases)

Residential areas are also considered to be sensitive to air pollution because residents tend to be home for extended periods of time, resulting in sustained exposure to any pollutant present. Given the existing land uses (predominately residential) in the PDR and MDR area, all properties adjacent to the project lots meet this criteria for sensitive receptors and are considered in this study as such.

All project lots are located in residential neighborhoods and are surrounded by residential properties. If the abandoned oil or gas wells on the lots were to leak, new residents living on the project lots could be exposed to elevated pollutant levels that could possibly and occasionally exceed Ambient Air Quality Standards. It is also possible that some new PDR lot owners could be exposed to emissions from ongoing operations or accidental releases of methane at the nearby PDRGSF. However, this potential impact is actually a baseline condition and not considered a direct impact of the proposed project.

There are three potential exposure scenarios that may expose sensitive receptors to substantial pollutant concentrations:

1) Existing receptors may be exposed to elevated levels of diesel particulate matter during construction activities.

2) Construction atop abandoned oil and natural gas wells could cause off-site migration of sub-surface gases that could expose sensitive receptors to toxic or explosive gasses associated with potentially leaking abandoned well-heads.

3) Normal operations at the PDRGSF or unplanned releases of toxic contaminants from the PDRGSF or any associated well-heads could expose new residents of the sale lots to potentially toxic air contaminants.

The following is a break down of each of these exposure scenarios.

Construction Activities

The use of heavy-duty diesel engines at the project sites could expose nearby residents to diesel particulate matter. Diesel particulate matter is a chemical known to the State of California to cause cancer in certain concentrations. Due to the relatively short-term exposure, nearby residents likely would not be exposed to substantial pollutant concentration. As such, construction at the project sites is not expected to expose existing sensitive receptors (nearby residents) to substantial toxic air contaminants.

During construction of future buildings on the projects lots, digging activities could cause a release of gas from the abandoned wells through the accidental damaging of the buried well heads. With proper marking of the abandoned wells and consideration of placement of future structures on the lots, it is unlikely that this potential impact would occur. This potential impact is further discussed in Section VII, *Hazards and Hazardous Materials*. Likewise, this potential impact and any potential mitigation measures to ensure avoidance of possible damage to buried well heads will be considered further in the EIR.

Offsite Migration of Subsurface Gasses

The foundations of new structures placed atop the abandoned oil and gas wells have the potential to force subsurface gasses from any leaking wells to migrate laterally under the building foundations or parking lots. While the extent of this migration depends greatly on

a number of factors which include the amount of gas released and the measures used to seal the foundation, this circumstance has the potential to expose sensitive receptors that would normally not be exposed.

One study (Giroux, 2001) has been performed at two Clusters to assess the potential of methane migration at the project lots. While the initial testing concluded that subsurface migration was not occurring, the two locations where testing occurred may not be indicative of other sites and therefore the collected data cannot be interpolated to the remaining sites. Additional testing (including testing for methane, soil contamination and soil gas) of the sale lots will be performed over the next few months. Because there is no current evidence supporting the presence or absence of offsite migration of subsurface gasses, this analysis assumes that the potential exists to expose sensitive receptors to substantial pollutant concentrations from offsite migration. Results of further testing will evaluate the actual significance (if any) of offsite gas migration at the sale lots both in the vertical and the horizontal offsite directions. Health hazards associated with the gas migration is further analyzed in Section VIII, *Hazards and Hazardous Materials*.

PDRGSF Operations

Future residents located nearby the PDRGSF could occasionally be exposed to elevated pollutant concentrations from emissions associated with the ongoing operations or emergency or accidental releases of gases at the PDRGSF. However, this potential impact is a baseline condition and would not be considered a project related impact. These emissions would be similar to emissions currently experienced by existing residents living close to the SCG main facility or the neighborhood well sites. The greatest potential for exposure to unintentional releases of pollutants and odors from the proposed project would be to new residents located in the neighborhoods closest to the PDRGSF, in the vicinity of Falmouth Street, 79th Street, and Veragua Street. As is discussed in item e) below, there have been reported releases of methane from the PDRGSF and it is reasonable to assume that there will be releases in the future as well.

In addition, residents could be temporarily disrupted by activities associated with California Division of Oil, Gas and Geothermal Resources (DOGGR)'s rechecking of abandoned wells prior to issuance of building permits for those lots which have unused wells beneath the ground surface.

Thus, potential methane releases resulting from PDRGSF operations do not represent an impact of on the proposed project area and will not be considered further in this study.

Two of these three potential exposure scenarios represent potentially significant impact to new residents of the sale lots. At the level of detail considered in this Initial Study these scenarios must be considered potentially significant, even though it may be possible to mitigate these impacts. Additional analysis and additional field data collection will be presented in the EIR to both quantify these impacts and develop (if necessary) suitable mitigation measures.

e) Would the project create objectionable odors affecting a substantial number of people?

It is unlikely that as a result of the sale or development of the lots, that natural gas (the principle project-related odor source) would be released. However, if the gas abandoned well were to leak during construction activities (as is discussed in item "d" above) or later during future occupation of the project lots, new and existing residents could be exposed to objectionable odors. Odors due to natural gas are primarily associated with hydrogen sulfide, which is sometimes a component of natural gas, and mercaptans, which are added to natural gas for safety purposes. Odors, while not toxic at low levels, represent a nuisance to the public. Additional field testing is currently underway to determine to what extent the projects lots represent potential odor sources.

Currently, it is not clear whether placement of new buildings on abandoned wells would cause an odor impact to nearby sensitive receptors. To this end, additional subsurface and surface testing is currently underway to identify the presence or absence of any existing migration pathways and to assist in the development of mitigation measures to reduce any resulting significant impact to a less than significant level. This potential project-related impact will be considered and analyzed further in the EIR.

Although not considered a project-related impact, new residents of the PDR lots could be exposed to natural gas through accidental or emergency releases of gas from the PDRGSF or from associated operational well heads. Currently, odors related to PDRGSF operations are reported as noticeable in the PDR area. The SCAQMD defines odors that are perceptible to more than 10 residents from any single event as a significant impact.[4] The SCAQMD has investigated 60 odor complaints (SCAQMD, 2003) at the PDRGSF since 1988. The PDRGSF does release gas on an as-needed basis from its vent systems, and experiences fugitive leaks from valves, flanges and other piping at the facility. The complaint frequency is strongest downwind of the facility during light morning on-shore breezes. The addition of new residences to the local area could cause an increase in the number sensitive receptors exposed to gas releases and the associated odors. While the development of the lots is not expected to increase the likelihood of odor releases from the PDRGSF, development would increase the number of people exposed to any objectionable odor.

In summary, while the sale of the lots is not expected to contribute to odor emissions, the sale lots themselves may represent odor sources and thus represent a potential impact. Furthermore, the addition of sensitive receptors (new residents) to the project area could expose in excess of ten additional sensitive receptors to objectionable odors. These odor impacts are considered potentially significant and will be considered and analyzed further in the EIR along with potential mitigation measures to reduce the odor impact to less than significant.

4 Telephone conversation with Michael Krause of the SCAQMD CEQA Section, May 20, 2003.